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SELF-CONCEPT OF PUPILS IN A RESOURCE ROOM SETTING AND ITS RELATIONSHIP TO READING ACHIEVEMENT AND OTHER VARIABLES

by

© PATRICIA LYNNE LEGGE

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

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SPRING, 1978

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled SELF-CONCEPT OF PUPILS IN A RESOURCE ROOM SETTING AND ITS RELATIONSHIP TO READING ACHIEVEMENT AND OTHER VARIABLES submitted by Patricia Lynne Legge in partial fulfillment of the requirements for the degree of Master of Education.

.....Patricia Brown.....
Supervisor

.....D. Pane.....

.....Dawyd Sawchuk.....

Date April 18, 1978

To Kristy and Norman

ABSTRACT

The concern of educators about children who are not successful in the regular classroom reading program has resulted in the implementation of a resource room program in Edmonton Public Schools which is designed to enhance competence in the language arts and which is supplementary to the classroom language arts program. This study investigated the self-concept of grade three and four pupils who attended the resource room (the treatment group) over a twenty-six week period as compared to regular class pupils who were not having difficulty in reading (the control group) and who were not recommended for resource room placement. The relationships of the resource room pupil's self-concept to reading achievement, sex, grade-level, resource room teacher's rating of self-concept and resource room teacher's rating of language arts ability were also explored.

The sample consisted of 125 treatment group pupils and 34 control group pupils attending regular grade three and four classes in the Edmonton Public School System. The treatment group consisted of 90 boys, of which 56 were in grade three and 34 in grade four, and 35 girls, of which 21 were in grade three and 14 in grade four. The control group consisted of 12 boys and 10 girls in grade three and 6 boys and 6 girls in grade four. Children were drawn from high, middle and low socioeconomic areas. Intelligence was not used as a factor in selection of the sample.

The Piers-Harris Childrens' Self-Concept Scale (a self-report) was administered on a pretest and posttest basis to treatment

and control groups in the Fall of 1976 and Spring of 1977. Results of the reading achievement tests administered by the resource room teacher to treatment group pupils at the beginning and end of the resource room treatment and the results of the rating scales were made available by the Edmonton Public School Board.

Statistical analysis of the data was made by means of an analysis of variance, an analysis of covariance, a t-test and the Product Moment of Correlation methods. Computer programs made available by the Department of Educational Research Service were utilized for this purpose.

The findings of the study indicate that pupils who were designated as being in need of help in reading and who attended the resource room program had slightly less positive self-concepts than their regular classroom peers not so designated. Although both groups made gains in self-concept over the eight-month period, the pupils in the resource room continued to hold less positive self-concepts than the control group at the end of the treatment period. No significant relationship was found between the self-concept of the treatment group and reading achievement scores, sex, grade-level, or resource room teacher ratings of pupil self-concept. The relationship between self-concept and resource room teacher ratings of language arts ability was found to be significant only at the beginning of the treatment period.

Implications of the findings for teachers are discussed. Several suggestions for further research related to the study of self-concept in education are presented.

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Chapter I

PURPOSE OF THE STUDY

I. INTRODUCTION

Educators are becoming increasingly concerned with the effects of early school experiences on how children feel about themselves as learners and people. This concern reflects both the current humanistic philosophy in education as well as the knowledge that feelings of self-worth can and do affect academic performance. Studies of the relationship of self-concept and academic success consistently indicate that these two factors are related (Bledsoe, 1967, Ruhley, 1971, Stuckey, 1975, West, 1976). Other studies have found that a similar relationship exists between self-concept and reading achievement (Zimmerman and Allebrand, 1965, Jason and Dubnow, 1973), with poor readers tending to think of themselves in less positive terms than their more successful peers. Thus, it would appear that teachers must not only be concerned with the reading skill weaknesses of pupils but also the effect that this failure to achieve may have on the feelings of poor readers as learners and persons.

One response to the needs of children having difficulty learning to read is to offer small-group instruction in reading as a supplement to the regular classroom language arts program. The Edmonton Public School Board has offered such a small-group instructional program in a "resource room setting". Children of average or better

ability having difficulty with reading attend the resource room on a daily basis for one-half to one hour. The objective of the resource room program is to improve both reading skills and attitude towards reading. The Evaluation of the Elementary Language Arts Assistance Project (1976) indicates that the resource room program has been successful in improving reading skills. No statistical data on change in attitude or self-concept was reported. However, teachers felt that pupils showed more positive attitudes toward reading and towards themselves after the resource room experience. Seay (1961) reported the results of a similar program for boys of average intelligence and low reading ability. He found a positive relationship between self-concept and levels of vocabulary, comprehension and total reading skills. Total self-concept changed as a result of the remedial reading program but there were no changes in personal self-concept.

The implication of the research is that poor readers tend to see themselves in negative ways but that certain reading-help programs may be effective in improving both reading skill development and self-concept. The objective of the present study is to supplement the research in this important area.

II. STATEMENT OF THE PROBLEM

This study investigated the self-concepts of a group of children in grades three and four designated by school personnel as having difficulty in reading. This group of children were assigned to a remedial reading program called a "resource room program" for a period of the regular school day. The study sought to determine how this

group of pupils in a resource room setting compared to their regular classroom peers in terms of self-concept at the outset of the treatment (resource room program) period and again at the end of the treatment period. It also attempted to determine if there is a significant correlation between the self-concepts of pupils in a resource room setting and reading achievement scores at the beginning and at the end of the treatment period. The relationships of self-concept with sex, grade level, teacher ratings of self-concept and teacher ratings of language arts ability were also considered.

III. IMPORTANCE OF THE STUDY

The importance of acquiring the basic reading skills in the elementary school is receiving renewed emphasis with the public's cry of "back to the basics". Special-help programs are responding to the needs of the children who need extra help to learn these basic reading skills. However, little is known about the effects of such programs on the pupil's self-concept. If, in fact, success in acquiring skills is met in the program, is this enough to make a significant effect on how the child feels about himself? This and other questions about the affective implications of remedial reading programs are not adequately answered by available research. It is hoped that the present study can contribute some information to this area of inquiry.

IV. LIMITATIONS OF THE STUDY

The following limitations should be observed with respect to the design of this study and the applicability of the findings:

1. The selection of sample students for the treatment group in this

investigation was drawn solely from the group of students attending the resource room program offered by the Edmonton Public School Board in the 1976-77 school year. Students in the control group were matched to students in the treatment group only in that both groups attended the same schools and were in the same grade (either grade three or grade four).

2. Pupils who attended the resource rooms in this study were referred on the basis of the classroom teacher's judgement about a pupil's language arts deficits as well as on the basis of the pupil's reading test results prior to referral. However, criteria for referral may vary from school to school. Thus treatment group pupils in the study are not necessarily homogeneous in terms of the nature and severity of their reading difficulties.

3. The accuracy of the self-report technique for measuring self-concept in this investigation is limited by the individual's level of self-awareness and willingness to cooperate. Suggestions made by authors of the test instrument for encouraging cooperation and accuracy of response by the subjects were followed carefully by this investigator.

4. The self-report was administered by the investigator and a research assistant in a variety of school settings. It is possible that the testing situation varied slightly from school to school.

5. The instruments by which resource room teachers rated the self-concept and the language arts abilities of resource room pupils consisted of one and three items respectively. It must be recognized that such brief instruments are questionable and the results reported should be considered in light of this.

6. Reading achievement was measured in this study by a battery of diagnostic reading tests rather than a standardized reading test and

therefore no normative data were available for the performance levels observed.

V. DEFINITION OF TERMS

A number of terms having specific meaning and used frequently in this investigation follow:

1. Control group - The control group refers to that group of pupils who were enrolled in regular grade three and grade four classrooms but were not designated as needing extra help in reading.

2. Treatment group - The treatment group refers to that group of pupils who were enrolled in regular grade three and four classrooms and were designated as needing extra help in reading.

3. Global self-concept - Global self-concept refers to the composite view one has of oneself related to behavior, intellectual and school status, physical appearance and attributes, anxiety, popularity, and happiness and satisfaction.

4. Self-concept - A person's self-concept is "a complex and dynamic system of beliefs which an individual holds true about himself, each belief with a corresponding value" (Purkey, 1970, p. 7).

5. Reading achievement - Reading achievement is the attained level at which a student is functioning in reading as measured by some instrument. For the purposes of this study reading achievement refers to scores on a test battery consisting of The Botel Reading Inventory (sight word subtest), The Roswell-Chall Phonics Test, Schonell's Graded Word Reading Test, and Schonell's Graded Word Spelling Test.

6. Resource room program - This term applies specifically to the remedial reading program implemented by the Edmonton Public School Board during the 1976-77 school year. The program is also known as the Elementary Language Arts Assistance Project.

VI. RESEARCH QUESTIONS AND HYPOTHESES

The following research questions were formulated and then set up as null hypotheses for the purpose of statistical analysis.

Research Question 1

How do poor readers in a resource room setting compare with their regular classroom peers in terms of self-concept?

Null hypothesis 1a. There is no significant difference in self-concept between the treatment group and the control group at the beginning of the treatment period.

Null hypothesis 1b. There is no significant difference in self-concept between the treatment group and the control group at the end of the treatment period.

Research Question 2

Is there a significant correlation between the self-concept of treatment group pupils (those who attended the resource room program) and reading achievement test scores at the beginning and at the end of the treatment period?

Null hypothesis 2a. There is no significant correlation between self-concept and reading achievement test scores of treatment group pupils at the beginning of the treatment period.

Null hypothesis 2b. There is no significant correlation between self-concept and reading achievement test scores of treatment group pupils at the end of the treatment period.

Research Question 3

Is there a significant correlation between self-concept and sex, grade level, resource teacher ratings of pupil's self-concept and resource teacher ratings of pupil's general language arts ability?

Null hypothesis 3a. There is no significant correlation between self-concept and sex.

Null hypothesis 3b. There is no significant correlation between self-concept and grade level.

Null hypothesis 3c. There is no significant correlation between pupils' self-reports and the resource room teachers' ratings of the children's self-concepts.

Null hypothesis 3d. There is no significant correlation between pupils' self-concepts and the resource room teachers' ratings of the children's general language arts ability.

VII. OVERVIEW OF THE THESIS

This report consists of five chapters. Chapter I has provided an introduction to the problem under study. It included a statement of the problem, the importance of the research, the limitations of the study, a definition of terms, and the research hypotheses to be tested.

Chapter II will review the research and literature related to self-concept and the relationship of self-concept to both general and reading achievement.

Chapter III will include a description of the research instruments, the sample, the resource room setting, the collection of the data, and the procedures for analysis of the data.

Chapter IV will consist of an analysis and interpretation of the data. The research hypotheses will be examined on the basis of the statistical data.

Chapter V, the final chapter, summarizes the findings and reports the conclusions that the study will support. Some implications and suggestions for further research will conclude the report.

Chapter II

REVIEW OF RELATED LITERATURE AND RESEARCH

I. INTRODUCTION

This chapter will begin with a brief overview of self-concept theory in an historical perspective. Characteristics of self-concept as described by current self-concept theorists will then be presented in order to provide a theoretical basis for certain assumptions made in this study. Literature related to the development of self-concept will be examined only insofar as it specifically relates to self-concept development of the age group under study, eight and nine year-old children. Research which examines the relationship of self-concept to school achievement will then be reviewed. Specific attention will be given to studies focussing on the relationship of self-concept and reading achievement since self-concept and reading are the major areas of interest to the present study. The final section will deal generally with approaches to the measurement of self-concept. The difficulties of measuring self-concept and the author's solution to that problem will be discussed.

II. SELF-CONCEPT THEORY

Historical Perspective

Although references to the self have appeared in the writings of philosophers, poets and theologians as far back as the Middle Ages,

self-concept theory is basically a twentieth-century phenomenon. Current self-concept theory has its roots in the work of William James, among others. James, in his book entitled Principles of Psychology (1890), proposed a theory about the "Consciousness of Self". James believed that the individual possesses an "ego" or sense of identity that includes spiritual, material and social aspects. These aspects were thought to be incorporated into a global, conscious concept of self which has a dynamic quality in terms of seeking enhancement and a stable quality in terms of self-preservation. G. W. Allport (1937) shared James' concept of a dynamic self which was both an object (awareness of self) and a process (striving activity). Although the work of Freud (1946) had implications for self-concept theory, its focus was on unconscious rather than conscious motivations. The "ego", as Freud termed the idea of self, was a functional agent for controlling the individual's actions in an attempt to balance impulse with conscience. The awareness of self and dynamic qualities of the self are not present in Freudian theory. Philosopher G. H. Mead held theories more closely aligned with those of James and Allport. Mead believed that a person is made aware of his self by the way other people react to him. This feedback generates certain feelings and attitudes which are incorporated into the self-concept. In the book Mind, Self and Society (1934), Mead described how the self is developed through transactions with the environment. Lewin's (1935) theories are similar to Mead's but are expressed in different terminology. Lewin represented the self as a "life space" consisting of all an individual's personal experiences. This relatively permanent organization of experiences determines how a

person will behave in certain situations. To change behavior one would have to change elements in the individual's "life space".

Although Allport, James, Mead and Lewin were making important contributions to self-theory during the 1930's, interest in the self by psychologists in general declined during the period of the 1920's and 1930's. During that time, behavioral scientists came to dominate American psychology (Wylie, 1961). The behaviorists felt that only observable behavior was capable of being documented experimentaly and, therefore, a fit subject for scientific inquiry. However, the 1940's and 1950's saw a resurgence of interest in the importance of self theory to the study of human behavior. Perhaps the most significant contributions made during that time were those of Carl Rogers (1947, 1951). He developed a system of psychotherapy based on the belief that the self is of central importance to the individual's behavior and adjustment. Rogers' self theory described the self as a pattern of conscious perceptions arising from a person's relationships with others and striving for consistency. A healthy self-concept or "self-actualization" as Rogers puts it, will occur if the individual consistently receives positive regard from others (and from oneself) about performance in the important areas of that individual's life. Rogers' greatest contribution was a synthesis of previous theories into one general approach to the study of the self which could be useful as a pragmatic tool for changing behavior.

Rogers and others (Snygg & Combs, 1959, Jersild, 1952) are "phenomenologists". They believed the pattern of conscious perceptions experienced by the individual ("phenomenal field") determines all behavior. The self is seen by phenomenologists as "a complex and

dynamic system of beliefs which an individual holds true about himself, each belief with a corresponding value" (Purkey, 1970, p. 7). The self is one differentiated area of the phenomenal field. The individual is seen as behaving in accordance with his beliefs about what he is and what he can do. Each individual sees himself and the world in a unique way conditioned by his own perceptions of his experiences. The phenomenological theory appears to have gained general acceptance from current researchers and writers in the area of self-concept. This theoretical basis is evident in the writings of LaBenne and Greene (1969), Purkey (1970) and Quandt (1970) all of whom are important contributors to current study of the self-concept. Many researchers including Bledsoe (1967) and West (1976) indicate concurrence with the elements of phenomenological theory. Such researchers presume that the self-concept is conscious and unique, therefore it can best be measured by asking a person about his self feelings. The self is subject to influence by interpersonal experience, therefore the self-concept may be altered by certain types of conditions. The phenomenological field of experiences determines behavior, therefore a change in self-concept (or any other element of the phenomenal field) will produce a change in behavior. The present research also finds its basis in the tenets of the phenomenological self-theory.

In summary, the development of self-concept theory is a twentieth century phenomenon. Although the idea of self was present in the earliest writings on the nature of man, William James was the first to organize a theory of the self. James' theory was expanded by others from various fields in the 1930's. The field of psychology became the

nurturing environment for self-theory in the 1940's and continues the role to this day. The phenomenological theory of the self has gained wide acceptance and is the basis of much of the current study of self-concept.

III. CHARACTERISTICS OF SELF-CONCEPT

Current self-concept theory and research suggests that the self-concept has certain essential characteristics:

1. The self-concept is a complex system of affective and cognitive processes related to how an individual views himself as a person.
2. The self-system is both stable (strives for consistency) and dynamic (strives for enhancement).
3. Change in the self-system occurs through interraction with other people who are viewed as significant.
4. The self-concept is a determining force in behavior.

La Benne and Greene (1969) succinctly define self-concept as "the person's total appraisal of his appearance, background and origins, abilities and resources, attitudes and feelings which culminate as a directing force in behavior" (p. 10). The word "appraisal" in this definition implies the existence of some sort of valuing process. The idea that a person makes judgements about the value of his own beliefs and feelings is shared by Purkey (1970) who states that "each concept... in the (self) system has its own generally negative or positive value" (p. 9). Purkey goes on to cite research which indicates that a positive experience can raise an individual's total evaluation of himself, even if that experience is related to only one area of functioning. Studies cited (Diggory, 1966, Ludwig and Malhr, 1977) indicate that success or

failure of one important ability can have a generalized effect on other seemingly unrelated abilities. For example, the child who views reading as an important area of study and who does well in that area may also see himself as being a good friend or a good mathematician whether or not the child does in fact, excel in these other areas. A fifth characteristic may then be added to the above list:

5. The self-concept involves a valuing process by which elements of the self-system are given positive or negative evaluations. Evaluation of one element in the system affects the evaluation of other elements in the system.

These five characteristics of self-concept are basic to this study. If they accurately describe a person's self-concept then, for purposes of the study, it is valid to assume that:

1. Self-concept exists as a construct capable of being examined in research in that we may infer self-concept from some behavior (or from a report of behavior).

2. Asking an individual to make judgements about elements of his "self" in a research setting is an extension of the natural valuing process.

3. An individual's self-concept may change as a result of some type of treatment or experience in a social setting.

4. Research that is productive in finding ways to enhance an individual's positive evaluations of one skill or ability may be contributing to the enhancement of the total self-concept.

IV. DEVELOPMENT OF SELF-CONCEPT

The aim of this section is not to present a detailed description of the developmental stages of the self-concept. (The reader is

referred to G. W. Allport's book titled Pattern and Growth in Personality, 1966, for such an account). Rather, this section attempts to present evidence which suggests that eight and nine year old children are capable of an awareness of their "selves"; that a number of factors affect the child's view of himself at that age; and that the school experience is an important medium for the development of self-concept. These propositions are basic to the present study.

In 1946, Gesell described the eight year old as a person who is "conscious of himself as a person and recognizes some of his differences from others and voices them. (He) talks more freely about himself. (He) thinks about his "self""(p. 321). The nine year old is described as becoming increasingly self-conscious, sensitive to correction and having a need to succeed. Mitchell (1977) agrees with Gesell's earlier observations and further notes that children at eight and nine years old are generally able to make more advanced self-evaluations and self-analyses than was true up to that age. Coopersmith (1967) notes that it is sometime during the period just preceding middle childhood that an individual arrives at a general appraisal of his worth. The child is also becoming capable of more abstract thinking with greater organization of his thoughts. According to Piaget and Inhelder (1969) it is between the ages of seven and eight that the child reaches a logical stage characterized by the tendency to systematize and unify beliefs and opinions. Piaget's research confirmed that the individual is now able (by age eight) to reproduce towards himself attitudes which he had previously adopted toward others. Thus, although the child has been aware of his "self", what is 'me' and what is not 'me' since

infancy (Jersild, 1960), it is at age eight and nine that his evaluations of himself seem to assume greater importance, accuracy and stability.

The quality of interpersonal relationships determine the direction of the child's increasing concern about his own worth. Parents, of course play a crucial role throughout childhood. Research by Coopersmith (1967) found that children with positive self-esteem often came from homes where parents displayed acceptance of their children's behavior but defined and enforced limits to that behavior. The parent is the most "significant other" in the early life of the child and the quality of the early parent-child relationship has a tremendous influence on self-concept development (Erickson, 1951, Sullivan, 1947, Purkey, 1970). When the child enters the world of school he enters into a larger set of interpersonal relationships and experiences. Jersild (1952) states that the school is second only to the home in determining an individual's concept of himself and his attitudes of self-acceptance or rejection. A harsh and unsympathetic teacher, Jersild says, can have a detrimental effect on the child's feelings of worth even if that child had developed a healthy concept of himself prior to entering school. At age eight and nine years the child is very concerned about succeeding in the eyes of his teacher and peers (Gesell and Ilg, 1949) and school provides multiple opportunities for testing his intellectual, social and physical abilities. La Benne and Greene (1970) draw on a number of research studies to support their conclusion that the pupil's self-concept can be irrepairably damaged by certain practices in the school. Ability grouping, failure (non-promotion) and insensitivity to children's individual differences are cited as examples of damaging practices. They

are optimistic, however, that teachers are beginning to realize and take advantage of their important role as a major contributing agent to the child's self-concept development.

One crucial challenge at school--achieving academically--appears to be highly significant in its relationship to the pupil's feelings of self-worth. This relationship will be examined in the next section.

V. SELF-CONCEPT AND SCHOOL ACHIEVEMENT

It has been hypothesized that the way a child feels about himself affects that individual's success as a learner at school. The research persistently supports this hypothesis (Bledsoe, 1967, Brookover, 1967, Stuckey, 1975, West, 1976). Generally the results of studies of the relationship of self-concept to academic achievement indicate that low self-concept and poor academic success often go hand in hand. The results are the same when self-concept and reading success only are compared. Self-concept emerges as a significant factor in both general school achievement and, more specifically, in reading achievement. Let us examine the research into this relationship.

It should be noted at the outset that current research on the self-concept of learners is not extensive. Most research on the topic was done in the 1960's, dominated by the extensive studies of Brookover and associates from 1962-1968. The last few years have seen only the occassional journal article and a few doctoral dissertations describing investigations into self-concept related to school achievement. The available research, however, is substantial enough to warrant review.

Several researchers have attempted to study the relationship of self-concept and achievement by comparing groups of achievers and non-achievers. Bodwin (1959) studied three hundred students in the third and sixth grades, one hundred with a reading disability, one hundred with an arithmetic disability and one hundred with no disability. The results revealed a positive correlation between immature self-concept and both reading and arithmetic disability. The relationship was stronger at the third grade level than at the sixth grade level indicating age differences. A similar study by Bruck (1959) found a significant positive relationship between self-concept and grade-point average at the third, sixth and eleventh grade levels. This study found age and sex differences at the early elementary and senior high levels but not at the late elementary level. Over-achievers and under-achievers were also studied by Lumpkin (1959) and Brookover, Sailor and Patterson (1964). Both studies found a significant positive relationship between self-concept and general academic achievement. The extensive studies of Brookover et al (1962 through 1968) followed pupils from the seventh to the twelfth grades in order to study the relationship of self-concept of academic ability to school achievement. Among the findings were that the self-concept of ability is significantly related to success in school for both boys and girls even when intelligence is factored out. These studies looked at both self-concept of ability and over-all self-concept as predictors of school success. It was found that self-concept of ability was a better predictor of school success than was all-over (or total) self-concept. A recent study by James West (1976) investigated the differences in self-concept of children in different grades (one, three, and sixth grades) as well as the relationship of academic performances to self-

concept. He did find significant variance in mean self-concept scores among children in different grades. The mean self-concept scores were found to decline sharply at the third grade level. A significant (.05 level) relationship between self-concept score and academic performance was revealed. However, there were no differences in self-concept between boys and girls. The rather disturbing finding that there is a decline in self-concept scores at the third grade level is also supported by Stuckey's (1975) results. She administered a self-report instrument to five hundred and four boys and girls from kindergarten to grade six. Results suggest that grades three and five are times when decreases in self-concept are likely to occur, especially for low achievers. Findings of this study indicated differences between low and high achievers in relation to self-concept. Also, boys in primary grades appear to have a more negative self-concept than girls. In view of her findings, Stuckey recommends that provision be made in the curriculum for enhancing the self-concepts of low achievers, particularly boys, in the primary grades.

Other researchers have been particularly concerned with the relationship between self-concept and reading achievement. Since learning to read is a major focus of the elementary curriculum, one might expect that success in reading would contribute to a positive self-concept in the same manner as does general school success. The research suggests that this is so. Zimmerman and Allebrand (1965) compared two matched groups of subjects in grades four and five. One group was reading at grade level and the other was reading at least two years below grade level. Scores from the "Sense of Personal Worth" subtest of the California Test of Personality were significantly different ($p=.05$) when the two groups were compared, with the low achievers indicating

more negative feelings of self-worth. Successful readers and disabled readers were also compared in a study by Henderson, Long and Ziller (1965). Disabled readers of both sex were found to be characterized by a high degree of dependency. Similar studies by Toller (1969) and Hake (1969) found that poor readers tend to feel less adequate than more able readers. There are a smaller number of studies, however, that do not support the relationship between reading ability and self-concept. Ruhley (1971), for example, found no differences in the self-concept of good and poor readers at the second grade level. It is possible that the use of different measures of both self-concept and reading ability may account for the discrepancy in findings among some studies.

An important area of investigation for us as educators concerns the effects of certain treatments on the self-concept of poor readers. There are two possible solutions to the poor reader/poor self-concept situation:

1. Reading ability can be improved with, possibly a consequent improvement in self-concept.
2. Self-concept can be improved supplying new confidence and enthusiasm for learning to read.

Although studies are not proliferous in this area, some studies of treatments have focussed on the improvement of reading skills in order to improve self-concept. In a study similar to the present one, Seay (1961) attempted to determine the relationship between changes in reading skills and changes in self-concept of pupils (boys only) enrolled in a remedial reading program. The pupils, all of relatively normal intelligence, were divided into two groups. One group was of low reading ability while the other group had no reading problems. Seay found a positive relationship

between personal, social and total self-concept and levels of vocabulary, comprehension and total reading skills. There were changes in total and social self-concept (although not personal self-concept) as a result of the remedial reading program. Carlton (1964) documented the effects of self-directive dramatization in elementary classrooms over a period of $3\frac{1}{2}$ months. She found improvement in both reading skills and self-concept in all grades over the treatment period. However, studies by Lovinger (1967) and Carlton and Moore (1965) found no signigicant correlation between reading improvement and changes in self-concept in children enrolled in experimental reading programs. Experimental group children in both studies were involved in specific experimental reading programs thus limiting the generality of the findings. Also, the Carlton and Moore study involved only culturally disadvantaged children. Generally, the research in the area of treatment effects on self-concept and reading achievement is not substantive. More research into current techniques for improving both reading achievement and self-concept is definitely needed as is current investigation into the relationship of these two important areas.

The lack of substantive research may be, in part, attributable to the difficulties to be encountered in the measurement of self-concept. Problems and solutions in measuring self-concept are the topic of the following section.

VI. MEASURING SELF-CONCEPT

There are basically two techniques for the measurement of self-concept with considerable variation within each technique. Both techniques are based on certain assumptions that may be open to question.

The "direct technique" consists of a self-report of how a person feels about himself. The assumption made by users of this technique is that self-concept is conscious and that a person is able and willing to reveal his self-feelings verbally. "Projective techniques" are those which involve the inference of a person's self-concept from his behavior in a structured situation. The assumption here is that a person's behavior will accurately reflect his self-concept whether this conception is conscious or not.

Both techniques have been criticized regularly. The basic issue involved in the critiques seems to be construct validity, that is, does one or the other or both actually measure the construct of self-concept? La Benne (1969) as well as Quandt (1972) and Wylie (1961) seriously question the validity of the self-report. Yet, La Benne notes that "no one has the continuity of exposure and so continuous an opportunity to observe and evaluate his inner life and thought as the person himself"(1969, p. 11). Rogers (1961) believes that an individual's verbal report from his "internal frame of reference" provides the most accurate point from which to understand his behavior. The limitations of the self-report are pointed out by Snygg and Combs (1969). They maintain that the accuracy of a person's self-report depends on the clarity of the individual's awareness, language competency, his willingness to cooperate, social expectancy and freedom from threat.

The projective technique also has limitations. One must appreciate the importance of the skill and sensitivity of the observer. Quandt (1972) points out the necessity of objectivity by the observer and of an extended period of observation. Therrien (1960) notes that some projective instruments would reveal aspects of the subject's life

style and characteristic behavior but questions the extent to which they may be considered part of his self-concept.

A comparison study of results from direct and projective measures was done by Parker (1966). He obtained a self-report score (direct) and an inferred self-concept score (projected) for his grade six subjects. Parker found that the two scores were not significantly correlated. Wylie (1961) cautions that results of self-concept studies must be evaluated carefully in view of the characteristics of measuring instruments used.

When one weighs the evidence for and against the use of a self-report or a projective technique a number of factors must be considered. The lack of current research into measuring techniques offers no help in deciding on the "best" instrument for accurate research. The decision must ultimately be made by examining individual instruments for reliability, validity, suitability to the sample under investigation and consistency with the theoretical background of the research. This author, upon making such an examination chose the Piers-Harris Children's Self-Concept Scale (a self-report) as the most suitable instrument for the present investigation. Harris (1968) reports that the scale was judged to have good internal consistency as evidenced by the results of the Kuder-Richardson Formula 21 (coefficients ranging from .78 to .93) and the Spearman-Brown odd-even formula (coefficients of .90 for the grade six sample and .87 for the grade ten sample). Wing (1966) found the scale to have adequate stability finding test-retest coefficients .77 for both a two-month and four-month test-retest for two hundred forty-four fifth graders. Piers and Harris caution, however, that group

means on a retest have found to be consistently in the direction of a higher score, therefore they emphasize use of control groups to accurately assess change in self-concept over a treatment period. The test authors attempted to build content validity into the scale by relating test items to areas about which children reported qualities they liked and disliked about themselves (Jersild, 1952). The scores of the Piers-Harris scale were found to have correlations of .68 with the Lipsitt Children's Self-Concept Scale (1958) (Mayer, 1965). A review of the scale by Bentler in The Seventh Mental Measurements Yearbook (Buros, 1972) states that the Piers-Harris Children's Self-Concept Scale "possesses sufficient reliability and validity to be used in research as recommended by the authors" (p. 124).

The Piers-Harris Children's Self-Concept Scale is suitable for this field research in that the test was designed specifically for research purposes with a larger sample. It can be administered in group form to third and fourth graders (and older) which is the age group under investigation and is amenable to slight changes in presentation for poor readers such as the treatment group of this study. The scale is also consistent with the phenomenological view of the self taken by this researcher. That is, the scale reflects the belief that an individual's "true" self is composed of his personal perceptions and beliefs about himself regardless of how accurately these reflect other's opinions about that person's self.

For the reasons stated above, the Children's Self-Concept Scale was chosen as one meeting the requirements of a study such as this. The researcher is aware that certain precautions are necessary to ensure the most accurate self-report possible. These precautions are outlined

in the test handbook (Piers-Harris Children's Self-Concept Scale, 1967, p. 8) and were carefully carried out in this study.

SUMMARY

This study is based on currently held suppositions about the nature of self-concept. Although the ideas presented in this chapter represent the divergent views of several authors and researchers, the "phenomenological view" of self-concept is the one accepted by this author as the basis for the study. Several essential characteristics of self-concept were synthesized from the theory and research. Some assumptions based on these characteristics were proposed as the theoretical basis for the study. Research related to the age group in the study seemed to indicate that age eight and nine years is a significant stage in self-concept development. Yet, research by West (1976) and Stuckey (1975) suggests that children in this age group appear to have more negative self-concepts than children in other age groups. This finding, coupled with the tendency of poor readers to have more negative self-concepts (Henderson, Long and Ziller, 1965, Zimmerman and Allebrand, 1965) elicits concern about the self-concept of eight and nine year olds, especially poor readers. This age group is, therefore, the focus of this study. Can remedial reading programs help both self-concept and development of reading skills? Is improvement in self-concept in these programs related to reading achievement? These questions remain, for the most part, unanswered by research. The present study is designed to provide information in these important areas.

Chapter III

THE RESEARCH DESIGN

This section will include a description of the instruments, a description of the sample, a description of the resource room setting (Elementary Language Arts Assistance Project), the procedures for collection of the data and the procedures for analysis of the data.

I. DESCRIPTION OF THE INSTRUMENTS

The Piers Harris Children's Self-Concept Scale

This eighty-item self report instrument entitled "The Way I Feel About Myself" is a measure of general or total self-concept. Administered in group form it requires a third-grade reading knowledge. Items may be read aloud by the examiner if necessary. Children respond to simple descriptive statements, such as "I am a happy person.", by circling "yes" or "no". The items were selected to discriminate between students with very high total scores (indicating a positive self-concept) and very low total scores (indicating a negative self-concept).

Reliability - Internal consistency coefficients indicate stable rank orders of students on total scores. In a standardization study the Kuder-Richardson Formula 21 was employed with resulting coefficients ranging from .78 to .93. Reported split-half coefficients for the total score were .90 and .87 for grade six and grade ten pupils respectively. A two-month and four-month test-retest showed coefficients of .77 and .90 for two hundred forty-four fifth graders (Piers-Harris Scale, manual p.4).

Validity - The scale was judged to have validity when compared with similar instruments with correlations being in the mid-sixties. Teacher and peer validity coefficients are approximately .40. The authors attempted to build content validity into the scale "by defining the universe to be measured as the areas about which children reported qualities they liked and disliked about themselves (Jersild, 1952)" (Piers-Harris Scale, manual p. 5).

Bentler (1972), in a review of the Piers-Harris Scale, stated that the scale possessed sufficient reliability and validity to be used in research.

Reading Achievement Test Battery

A battery of diagnostic reading tests was chosen as the instrument for measuring the reading achievement of the treatment group. The battery consists of Schonell's Graded Word Reading Test, Schonell's Graded Spelling Test, The Botel Sight Word Test and The Roswell-Chall Phonics Test. These tests were chosen for the following reasons. According to the Evaluation of the Resource Room Project (1976) "the major stress was on phonics, sight words, spelling and comprehension abilities" (p. 6). All but comprehension skills are measured by this test battery. (The comprehension test now used in the resource rooms was not in use at the time this study began). Thus, the test battery measures progress in skills actually taught in the resource room setting. Each resource room teacher administers, scores and reports the results of the test battery described above as a regular part of the resource room program. All pupils are tested upon entering and leaving the resource room setting. Thus the study is assured of having pretest and posttest scores for the majority of sample children.

Description of the tests - Schonell's Graded Word Reading Test, Form A., consists of one hundred words of increasing difficulty which the child is asked to read aloud. The score is the total number of words read correctly. A grade-score is obtained by dividing the total score by ten. A child's grade-score represents the grade-level of material that the child can read easily.

Schonell's Graded Word Spelling Test, Form A., consists of one hundred words of increasing difficulty which the child is asked to spell. The total number of words spelled correctly can be divided by ten to yield a grade-score. No reliability or validity data is available for either of the two tests described above.

The Botel Sight Word Test (from the Botel Reading Inventory, Form A.) consists of eight lists of twenty words which the child must read aloud. A ten second time limit is suggested so that immediate recall of words is measured. Each list of words represents one of the following competency levels: pre-primer, primer, first-grade, second-grade, third-grade, fourth grade, fifth-grade and sixth-grade. The child must correctly read eighty-five percent of the words on a list in order to be given credit for competency at that level. No reliability or validity data is available for this test.

The Roswell-Chall Phonics Test measures the child's knowledge of sound/symbol relationships. Skill areas tested are beginning consonant sounds, sounds of consonant combinations, vowel sounds in isolation, short vowel sounds in words, vowel sounds in sentences, and the final 'e' rule. A review of the test by Aaron (1968) reported that subtest reliabilities for fifty-two children receiving remedial reading instruction ranged from .78 to .99. Correlations between total scores on the Roswell-Chall test and other tests are also mentioned but no data was reported by

Aaron. He notes that the validity coefficients based upon data from two second-grade classes, two fifth-grade classes and fifty-two remedial readers were lower for the remedial readers than for the others.

Teacher Rating of Self-Concept Scale

This scale is one of the items of the larger Attitude and Behavior Scale completed by resource room teachers as part of the resource room project. The item related to self-concept consists of a scale of one to five with a rating of one indicating a very negative self-concept and five indicating a very positive self-concept. The self-concept scale is completed by the resource room teacher after observing the child's behavior.

Teacher Rating of Language Arts Competency

This instrument is designed to rate a pupil's competence in three areas: oral language, written language, and comprehension skills. On this scale of one to five a rating of one would indicate that a child is performing far below potential while a rating of five indicates that the child is performing at an optimum level for his ability in the language arts measured. For the purposes of this study, the resource teacher's ratings in oral language, written language and comprehension skills were averaged to yield a composite rating in language arts.

II. DESCRIPTION OF THE SAMPLE

Pupils in the sample attended grade three or grade four in the Edmonton Public School System. Seven schools representing a variety of socioeconomic levels were selected. All of the pupils in each school who were in grade three or grade four and who were attending the resource room program comprised the treatment group. Control group pupils were

randomly selected from the class lists of the regular grade three and grade four classrooms in each school. Pupils in both treatment and control groups, therefore, attended the same schools and, usually were in the same classrooms.

Table 1 shows some of the characteristics of the sample population.

Table 1

Grade Level and Sex of Sample Pupils

	Grade Three		Grade Four	
	boys	girls	boys	girls
Treatment group	56	21	34	14
Control group	12	10	6	6

Total number of pupils in the sample = 159

Of the 159 pupils in the sample, 125 pupils were in the treatment group and 34 pupils were in the control group. The control group was comprised of a nearly equal number of boys and girls while in the treatment group the boys outnumbered the girls by 90 to 35. There were 99 grade four pupils and 60 grade three pupils in the sample.

III. DESCRIPTION OF THE ELEMENTARY LANGUAGE ARTS ASSISTANCE PROJECT (E.L.A.A.P.)

The Elementary Language Arts Assistance Project began in June, 1973 when The Edmonton Public School Board received a grant from the Alberta Educational Opportunities Fund. The project was to establish a number of resource rooms in elementary schools where children with specific deficits in language arts (particularly reading) could go for

a period of time during the school day. Children eligible for assistance are those in grades one to four who have average or above average ability but who show a significant discrepancy between actual and potential achievement in the language arts.

At the time of the study the program operated in all public elementary schools in Edmonton with teacher time allotments ranging from 0.3 to 1.0 depending on the number of children in the school needing extra help in language arts.

Objectives of the E.L.A.A.P. which are most relevant to this study are:

1. "To overcome specific deficits in the language arts skills before these become crippling disabilities complicated by emotional and social factors,

2. To prevent a child's loss of self-confidence and to enhance his feelings of success,

3. To approach more closely the goals of academic achievement set by parents, teachers and students themselves." (Resource Room Evaluation, 1973-74, p. 2)

The Evaluation Report completed in 1976 revealed that approximately three thousand five hundred children in the Edmonton Public School System received resource room help during the 1974-75 term. Of this number, two-thirds were boys and one-third were girls. Children were chosen to attend the resource room by the classroom teacher in consultation with the resource room teacher, the principal, the resource room reading specialist and often the teacher that the child had the year before. According to the report, most children met eligibility requirements; that is, they were essentially normal with specific deficits in language arts skills. The average length of attendance for

children in the resource room was twenty-four weeks. Teachers tended to favor an eclectic instructional program though other approaches were used as well. The greatest academic gains were made by grade two children and the smallest gains were made by grade four children. Over a six-month period the overall gain made by the children ranged from 0.9 years to 1.4 years in reading and 1.0 year to 1.4 years in spelling. These changes would represent a yearly growth rate of between 1.4 years and 1.7 years in reading and between 1.4 years and 1.5 years in spelling. In the area of attitudes and behavior, classroom and resource room teachers noted the greatest positive change in the areas of self-concept and liking to read.

IV. COLLECTION OF THE DATA

This section outlines the procedures involved in collecting the data used in the investigation. It should be noted that the present study was carried out in cooperation with the Department of Research and Evaluation of the Edmonton Public School Board. This department is responsible for a yearly evaluation of the resource room project.

Data collection began with the administration of the Piers-Harris Children's Self-Concept Scale to sample children. Treatment group pupils and control group pupils from each school were tested together in groups of ten to twenty children. All seven schools were tested during a one week period.

After the pupils were settled at desks, the examiner explained that she is a person who is interested in how boys and girls really feel about themselves. In every testing session an attempt was made to create a relaxed, informal atmosphere, often by chatting with pupils as they

entered the room and dispelling any notions that this was a test to be used for grading. They were told that the examiner was going to ask them some questions about how they felt about "things" and that it was very important to be truthful about their answers. It was stressed that this was not a test because there were no right or wrong answers. They were told that their responses would be kept confidential. The children completed the data sheet on the test cover with their name, age, grade, sex, school and date of the testing. Then the directions for the test were read orally. The directions suggested by the test authors were modified slightly so that, in the examiner's opinion, they would be clearly understood by grade three and four pupils.

The children's response sheet consisted of numbers one through eighty with the words "yes" and "no" beside each number. It was ensured that the pupils could discriminate the words "yes" and "no". The examiner read each statement orally from the manual. The child's task was to circle "yes" if the statement was 'like me' and "no" if the statement was not 'like me'. Since some items contained words which might be unfamiliar to eight and nine year-olds, standard definitions for such words were given after the item had been read. The testing session for each group lasted forty-five minutes. Children who arrived in the resource room later in the year (after the initial pretest date) were given the self-concept test by a research assistant. All sample children were posttested on the Piers-Harris Children's Self-Concept Scale in May, 1977. The mean number of weeks spent in the resource room was twenty-six weeks.

The Reading Test Battery was administered by the resource room teacher to each child upon entering and leaving the resource room program. This is a normal requirement of the E.L.A.A.P. program. Since the test

battery is quite time-consuming and must be individually administered, it was not feasible to test the control group with this reading achievement measure. Results of the reading achievement tests, the Teacher Rating of Language Arts Competency Scale and the Teacher Rating of Self-Concept Scale were obtained from the Edmonton Public School Board.

V. ANALYSIS OF THE DATA

The data was organized and punched on to data processing cards. The information was then put into a computer file in preparation for the statistical analysis.

The following methods of statistical analysis were used. Treatment and control group self-concept scores were compared using an analysis of variance and an analysis of covariance. The first analysis involved a comparison of mean pretest scores for both groups and mean posttest scores for both groups. The relationship of pre and posttest scores was tested for homogenity of regression using the analysis of covariance method. A *t*-test was used to find significance of difference between the means of the self-concept test scores for each group. The accepted levels of probability were considered to be .05 or less.

The relationship of self-concept to reading achievement was tested using the correlation method. The DEST 02 computer program provided correlation coefficients for the variables and the probabilities of *t* which indicated the significance of the correlations. Correlations and probabilities for the relationship between each of the subtests of the reading achievement measure and self-concept pretest and posttest scores were recorded. The DEST 02 computer program was also used to test the relationship between self-concept and sex, grade level, resource teacher ratings of self-concept, and resource teacher ratings of language

arts ability. Again, .05 was taken as the acceptable level of probability.

The results of the statistical analysis are presented in Chapter IV.

Chapter IV

ANALYSIS AND INTERPRETATION OF THE FINDINGS

In this chapter the results of the statistical analysis of the data will be presented and discussed with respect to the hypotheses advanced in Chapter I. The chapter is divided into four sections. Section one includes the analysis and interpretation of the data related to the self-concept of treatment group pupils compared to the self-concept of control group pupils. Section two deals with the relationship of self-concept to reading achievement in the treatment group. The data related to self-concept and sex, grade level, teacher ratings of self-concept and teacher ratings of language arts ability are analyzed in section three. A summary of the major statistical findings completes the chapter.

I. COMPARISON OF THE SELF-CONCEPT OF TREATMENT AND CONTROL GROUPS

In order to find out whether or not there is significant difference in self-concept between poor readers in a resource room setting and their regular classroom peers the following null hypotheses were tested.

> Null hypothesis 1a. There will be no significant difference in self-concept between the treatment and control groups at the beginning of the treatment period.

The scores for pupils on the self-concept pretest are shown in Table 2. A one-way analysis of variance method was used to compare the mean scores for treatment and control groups. A *t*-test was performed

to find the significance of the difference between the means for the two groups.

Table 2

Significance of the Difference Between Self-Concept Pretest Mean Scores for Treatment and Control Groups

Group	N	Mean	S.D.	Probability 1-Tail
Treatment	125	54.7	12.7	
Control	34	59.4	13.0	
				.028

The results of the analysis indicate a significant difference (p=.05) between the two groups on the self-concept pretest. Therefore, the null hypothesis is rejected.

Null hypothesis 1b. There will be no significant difference in self-concept between the treatment and control groups at the end of the treatment period.

Self-concept posttest scores were analyzed in the same manner as the pretest scores using a one-way analysis of variance. The results of that analysis are presented in Table 3.

The results indicate a significant difference (p=.01) between the means of the two groups on the self-concept posttest. However, when treatment and control group posttest scores were compared using an analysis of variance with the pretest score as a covariate, the pretest score appears to account for much of the variance. Table 4 shows the results of the analysis.

The results shown in Table 4 indicate there is a significant relationship between pretest score and posttest score on the self-concept

Table 3

Significance of the Difference Between Self-Concept Posttest Mean Scores for Treatment and Control Groups

Group	N	Mean	S.D.	Probability 1-Tail
Treatment	125	55.7	15.1	
Control	34	62.6	10.1	
				.006

Table 4

Comparison of Treatment and Control Group Scores with Pretest Score as a Covariate

Source	M.S.	F-Ratio	Probability
Treatment/Control	.477	3.12	.079
Pretest Score	.726	47.4	.000

measure. Group membership (treatment or control) is not significantly related to the self-concept posttest score when the pretest score is considered.

An analysis of covariance was performed to investigate the interaction between the pretest and the treatment. The test for homogeneity of regression revealed that treatment and control groups are not significantly different in terms of interaction between the pretest and the treatment. That is, the difference in slope of the scores of the two groups is essentially null. The implication is that the treatment (attendance in the resource room) did not significantly affect the post-test scores of the treatment group in that the pattern of change in self-concept over the treatment period was nearly parallel for the treatment and control groups. The null hypothesis cannot be rejected in that there were not significant differences in self-concept between the groups at the end of the treatment period as a result of the treatment. It has been noted that a significant variable in posttest score differences was the pretest score. An additional finding was that the pattern of change in self-concept of both treatment and control groups over the treatment period was in a positive and parallel direction.

II. SELF-CONCEPT AND READING ACHIEVEMENT

In order to test the significance of the relationship between the self-concept of pupils in the resource room setting and their reading achievement test scores the following null hypotheses were tested.

Null hypothesis 2a. There is no significant correlation between self-concept and reading achievement test scores of treatment group pupils at the beginning of the treatment period.

Table 5 shows the correlations between self-concept and each of the four subtests of the reading achievement measure.

Table 5

Correlation of Self-Concept and Reading Achievement Pretest Scores for 34 Treatment Group Pupils

Test	Self-Concept
Schonell's Word Reading Test	.032
Schonell's Spelling Test	.070
Botel Sight Word Test	.000
Roswell-Chall Phonics Test	-.035

Low positive correlations were found between self-concept pretest scores and the Schonell's Word Reading Test, the Schonell's Spelling Test, and the Botel Sight Word Test. The scores on the Roswell-Chall Phonics Test appear to be negatively correlated with self-concept. None of the correlations were significant at the p=.05 level. Thus, the null hypothesis 2a. cannot be rejected. The data indicates that there is not a significant relationship between reading pretest scores and self-concept pretest scores.

Null hypothesis 2b. There is no significant correlation between self-concept and reading achievement test scores of pupils at the end of the treatment period.

Correlations for self-concept and reading achievement at the end of the treatment period appear in Table 6.

The results show no statistically significant correlations (p=.05) between self-concept and any of the reading achievement subtests. Low, positive correlations were found between self-concept and reading

Table 6

Correlation of Self-Concept and Reading Achievement Posttest Scores for 34 Treatment Group Pupils

Test	Self-Concept
Schonell's Word Reading Test	.072
Schonell's Spelling Test	.119
Botel Sight Word Test	.032
Roswell-Chall Phonics Test	.075

achievement subtest scores at the end of the treatment period. Thus, the null hypothesis cannot be rejected. The correlations between self-concept and the reading achievement subtests at the end of the treatment period are similar to those found between the two variables at the beginning of the treatment period. That is, low positive correlations were found but the relationship of self-concept to reading achievement (as measured by the tests used in this study) was not found to exist at a statistically significant level within the treatment group.

III. SIGNIFICANCE OF THE RELATIONSHIP BETWEEN SELF-CONCEPT AND OTHER VARIABLES

In order to determine whether or not there was a significant correlation between self-concept and factors of sex, grade level, teacher ratings of pupil self-concept and teacher ratings of pupil language arts ability the following null hypotheses were tested.

Null hypothesis 3a. There is no significant correlation between pupil self-concept and sex of pupils in the resource room setting.

The hypothesis was tested by means of the correlation method. The relationships of the self-concept pretest scores and the self-concept posttest scores were examined. The correlation coefficient for sex and self-concept pretest score was .018. The correlation coefficient for sex and self-concept posttest score was .003. These correlation coefficients are not statistically significant. The null hypothesis, therefore, cannot be rejected on the basis of these findings.

Null hypothesis 3b. There is no significant correlation between pupil self-concept and grade-level of pupils in a resource room setting.

A correlation coefficient of -.036 was found for self-concept and grade-level at the beginning of the treatment period. At the end of the treatment period the correlation coefficient was -.165. The results indicate no significant differences in self-concept between resource room pupils in grade three and those in grade four at either the beginning or the end of the treatment period. The null hypothesis cannot be rejected on the basis of the findings.

Null hypothesis 3c. There is no significant correlation between the pupil self-report of self-concept and the resource teacher ratings of pupil self-concept.

A correlation coefficient of .101 was found between pupils' self-concept pretest scores and the resource teacher rating of pupil self-concept. A correlation coefficient of .146 was found at the end of the treatment period. These correlation coefficients are not statistically significant, therefore null hypothesis 3c. cannot be rejected. Piers and Harris (1965) and others (reported in Harris, 1969) also found that children's self-reports of self-concept correspond only slightly with the way teachers rate them.

Null hypothesis 3d. There will be no significant correlation between pupil self-concept and the resource room teacher's rating of the children's general language ability.

The relationship between rating in language arts and self-concept is different for the two testing occasions. At the beginning of the treatment period the variables were significantly correlated. A correlation coefficient of .226 was found between self-concept pretest scores and teacher ratings of language arts ability. However, the correlation coefficient was only .126 at the end of the treatment period indicating a weakening in the relationship between the two variables over the treatment period. The correlation coefficient at the end of the

treatment period was not statistically significant. The null hypothesis is, therefore, rejected in respect to the relationship of self-concept and teacher ratings of language arts ability at the beginning of the treatment period. It cannot be rejected for that relationship at the end of the treatment period.

Table 7 summarizes the findings concerning the relationship of self-concept to sex, grade-level, resource teacher ratings of pupil self-concept, and resource teacher ratings of language arts ability for pupils in the resource room setting.

SUMMARY

This chapter has presented the results of the statistical analysis of the data and discussed these data with respect to the three areas of inquiry and the related null hypotheses which were advanced in Chapter I. The analysis of the data indicated that null hypotheses 1a. and 1b., related to a comparison of the self-concept of treatment and control group pupils, could be rejected. There appears to be a significant difference in self-concept between control and treatment group pupils. However, the treatment did not appear to have a significant effect on pupil self-concept.

Null hypotheses 2a. and 2b. could not be rejected. There is no evidence to support a significant relationship between self-concept and reading achievement within the treatment group as measured in this study.

Null hypothesis 3a. could not be rejected on the basis of the findings. Self-concept and sex did not appear to be significantly correlated for resource room pupils. Null hypothesis 3b. could not be rejected. No significant grade-level differences in self-concept were

Table 7

Significance of the Correlations Reported for Self-Concept and Selected Factors

Factor	Self-Concept					
	r		t		P	
	pre	post	pre	post	pre	post
Sex	.018	.003	.198	.037	.843	.971
Grade Level	-.036	-.165	-.402	-1.851	.688	.067
Teacher Rating of Self-Concept	.101	.146	1.126	1.636	.262	.104
Teacher Rating of Language Arts Ability	.226*	.126	2.579	1.406	.011	.162

*Correlation significant at the .05 level

found between grade three and grade four pupils in the resource room setting. Null hypothesis 3c. could not be rejected in that the children's self-report of self-concept correlated only slightly with the resource teachers' ratings of their self-concept. Null hypothesis 3d. was rejected in respect to the relationship of self-concept and teacher ratings of language arts ability at the beginning of the treatment period. However that null hypothesis could not be rejected in respect to the relationship of the two variables at the end of the treatment period.

All conclusions resulting from the analysis of the data will be discussed in terms of the relevant research in Chapter V.

Chapter V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

This chapter presents a brief summary of the study and an outline of the main findings. Conclusions drawn from the findings and the implications of these conclusions for educators are discussed. Recommendations for further research are also made.

I. SUMMARY OF THE STUDY

The major purpose of this study was to investigate the self-concept of poor readers in a resource room setting compared to their regular classroom peers over a period of one school year. The study also explored the relationship of self-concept and reading achievement for resource room pupils, as well as the relationship of self-concept to sex, grade level, resource teacher ratings of self-concept and resource teacher ratings of language arts ability.

A review of the related research revealed that there is evidence to suggest that poor readers hold more negative concepts of themselves than do successful readers. Various treatments, including remedial reading programs, have been suggested as remedies for both poor reading skills and poor self-concepts. There is strong evidence to suggest that remedial reading programs do improve reading skills but the evidence as to the affective results of such programs in the elementary school is not extensive. The relationship of self-concept

to factors of achievement, sex, grade-level and teacher perceptions of self-concept and ability of pupils in settings such as the resource room has been investigated by researchers but the findings are not conclusive.

Grade three and grade four pupils from seven schools in different socioeconomic areas selected by the Edmonton Public School Board constituted the sample for the treatment and control groups. All of the pupils in each school who were in grade three or grade four and who were attending the resource room program comprised the treatment group. The treatment group consisted of 125 pupils, of whom 90 were male and 35 female. There were 77 grade three pupils and 48 grade four pupils in the treatment group. Control group pupils were randomly selected from the class lists of the regular grade three and grade four classrooms in each of the seven schools. Cooperation and help in the collection of the data on the treatment group pupils was provided by the Department of Research and Evaluation of the Edmonton Public School Board. The Piers-Harris Children's Self-Concept Scale was administered to all sample children by the investigator and a research assistant from the Edmonton Public School Board in the fall of 1976 and again in the spring of 1977. Data related to reading achievements, teacher ratings of self-concept and teacher ratings of language arts ability of resource room pupils was provided by the Edmonton Public School Board. The data were organized and then statistically analyzed using the analysis of variance, analysis of covariance, Product Moment of Correlation and t-test methods.

II. MAIN FINDINGS AND CONCLUSIONS

The findings and conclusions are presented below in relation to the three research questions posed in the study.

Research Question 1

The first question asked how poor readers in a resource room setting compare with their regular classroom peers in terms of self-concept.

Mean pretest scores on the Piers-Harris Children's Self-Concept Scale for treatment and control groups were compared using the analysis of variance method. The results showed a statistically significant difference between the mean scores of the two groups. Pupils attending the resource room appeared to have slightly lower self-concepts than their regular classroom peers. This finding agrees with those of Zimmerman and Allebrand (1965) and Henderson, Long and Ziller (1965) who found that poor readers tend to have more negative feelings of self-worth than do successful readers. When mean self-concept scores on the posttest were compared, again significant differences were found between the treatment and control groups. Although both groups made increases in self-concept scores over the treatment period, the poor readers were still less positive in their reports of self-concept than were the control group at the end of the treatment period. Pretest score appeared to be a significant determinant of posttest score. When the interaction of pretest scores and posttest scores for each group was tested for homogeneity of regression, a parallel pattern of growth in self-concept was revealed. Thus, treatment and control group pupils made similar gains in self-concept suggesting that the resource room experience examined in this study did not significantly affect the self-concept of the treatment group pupils. On the other hand, a study by Seay (1961) did find that poor readers showed increases in total self-concept after attending a

remedial reading program. The evidence from this study supports the conclusion that poor readers in a specific resource room program show less positive self-concepts than their regular classroom peers but that the resource room program described in this study did not significantly alter total self-concept over a twenty-six week period.

Research Question 2

The second research question asked whether or not there is a significant correlation between the self-concept of pupils in a resource room setting and reading achievement.

The correlations between self-concept and the four reading achievement tests (Schonell's Graded Word Reading Test, Schonell's Graded Word Spelling Test, The Botel Sight Word Test and The Roswell-Chall Phonics Test) were not statistically significant at either the beginning or end of the treatment period. It appears that the self-concept of poor readers in the resource room setting is not significantly related to their level of achievement on the reading tests used for measuring achievement in the skill areas emphasized in the resource room program. The evidence presented in relation to research question 1 indicates a significant relationship between self-concept and achievement in that poor readers had slightly less positive self-concepts than more successful readers. However, the evidence presented in relation to research question 2 suggests that the severity of the reading skill deficiency is not a significant determinant of how the poor reader feels about himself.

Research Question 3

Research question 3 asked whether or not there is a significant correlation between self-concept and sex, grade-level, resource

teacher ratings of pupils' self-concept and resource teacher ratings of pupils' general language arts ability.

Sex - The correlation between sex and self-concept of resource room pupils was not statistically significant at either the beginning or the end of the treatment period. Bruck's (1959) study of upper elementary pupils also reported no sex differences in self-concept as did West (1976) in his study of pupils in grades one, three and six. However, Stuckey (1975) and Bledsoe (1967) found significant correlations between sex and self-concept. The evidence from this study does not support a relationship between self-concept and sex for poor readers.

Grade-Level - The correlation between grade-level and self-concept of resource room pupils was not statistically significant at either the beginning or end of the treatment period. Grade three and grade four pupils apparently do not differ significantly in self-concpet. Because of the similarity in age of the pupils in the sample of this study this finding might be expected. Other studies (Bodwin, 1959, Stuckey, 1975 and West, 1976) have found age differences in self-concept among pupils in grades one, three and six.

Teacher Ratings of Self-Concept - The correlation between resource teacher ratings of pupils' self-concept and self-concept (as measured by a self-report scale) was not significant at either the beginning or the end of the treatment period. This finding agrees with that of Piers and Harris (1965) who found that children's self-report corresponded only slightly with the way teachers rate them. The evidence from this study indicates that the resource room teacher's perceptions of the child's self-feelings and the child's perceptions of his self feelings do not assume congruency even after an extended period of interaction in a small-group setting.

Teacher Ratings of Language Arts Ability - The correlation between resource teacher's ratings of general language arts ability and self-concept was significant at the beginning of the treatment period but not significant at the end of the treatment period. The resource teacher's initial rating of the pupils' competence in oral language, written language and comprehension thus appears to be significantly related to how the child feels about himself. The correspondence of the language arts ratings and the child's self-concept however, diminishes over the treatment period. Although this phenomenon cannot be explained on the basis of the evidence in this study, the possibility exists that the resource teacher may rate the pupil more highly at the end of the treatment period in view of his improvement in the language arts in the resource room setting while the pupil, upon returning to the regular classroom may persist in seeing himself as less competent than his regular classroom peers (see discussion under research question 1). The findings of this study only indicate that a relationship between the resource teacher's ratings of language arts ability and self-concept exists at the beginning of the resource room experience.

III. IMPLICATIONS FOR TEACHING

The findings and conclusions of the study suggest the following implications.

1. If poor readers do have less positive self-concepts than good readers it must be assumed that good and poor readers are responded to in different ways for self-feelings are developed in social situations. Classroom practices that encourage positive growth in self-concept for all pupils regardless of ability might be explored by teachers.

2. The resource room program received by treatment group pupils in this study did not appear to be significantly affecting self-concept. It would appear that specific provision for the enhancement of self-concept must be made in order to change the poor reader's less positive self-image.

3. The results of the study suggest that the resource room teacher may not have an accurate picture of how the child feels about himself. The teacher's efforts to enhance the self-concept of poor readers in the resource room program might be guided by the results of a self-concept test administered at the beginning and end of the program.

IV. SUGGESTIONS FOR FURTHER RESEARCH

The following recommendations for further research are proposed.

1. The development of a valid and reliable self-concept test for young children that is easily administered and interpreted by classroom teachers might aid teachers in their attempts to meet the affective needs of young learners, particularly those of pupils having difficulty in the language arts.

2. A study comparing the efficacy of various types of remedial programs which provide for the enhancement of both reading achievement and self-concept would provide useful information for the design of resource room programs.

3. Further clarification of the relationship between reading achievement and self-concept could be provided by research.

4. A study to delineate, implement and assess specific teacher behaviors and instructional techniques that encourage a positive self-image in young learners would be valuable.

5. A study focussing on resource room pupils who have very low self-concepts might determine the effects on self-concept of a resource room program for pupils with extremely low self-images. Such a study might also examine the effects of resource room treatment on the reading self-concept, academic self-concept and global self-concept of pupils.

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